



Tabel 3. Characteristic metabolites applicable as biomarker(s) for Osteoarthritis.

Compound	δ (ppm \pm 0.05)	Designation	Multiplicity
Lactate	1.35	CH3	${f Doublet}$
	4.05	\mathbf{CH}	Quartet
Malate	3.13	CH2	Doublet
	3.23	CH2	Doublet
	4.33	\mathbf{CH}	Doublet doublet
β-alanine	2.40	CH2	Triplet
	2.88	$\mathbf{CH2}$	Triplet
Hypoxanthine	8.32	CH	$\mathbf{Doublet}$
3,4-Dihydroxymandelate	6.83	Cyclic H	Doublet
	6.90	Cyclic H	Singlet
	6.95	Cyclic H	${\bf Doublet}$
3-Hydroxycinnamic acid	7.03	\mathbf{CH}	Singlet
(3-hydroxykaneelzuur)	7.15	Cyclic H	${\bf Doublet}$
Alanine	1.48	CH3	Doublet
	4.13	\mathbf{CH}	Quartet
Asparagine	2.86	$\mathbf{CH2}$	Multiplet
	2.96	$\mathbf{CH2}$	Multiplet
N-acetyl asparate	2.02	CH3	Singlet
	2.56	CH2	Multiplet
	2.74	CH2	Multiplet
	4.40	\mathbf{CH}	Multiplet
Aliphatic region	2.0-2.9		
Alkene region	3.0-4.7		
(Hetero)aromatic region	6.3-7.5		